REMARKS

Applicant is in receipt of the Office Action mailed September 20, 2005.

Claim Status

Claims 7-10, 17-22, and 25-33 were pending prior to entry of the present amendment.

Claims 1-6, 11-16, and 23-24 have been canceled.

Claims 7-10, 17-22, and 25-33 are now pending.

Objections

Claim 29 was objected to as a duplicate of claim 28.

Applicant notes that each image in the sequence of images is comprised of one or more objects. Therefore, in claim 28 "the weight is a specified non-negative value less than or equal to 1 for each image", whereas in claim 29 "the weight is a specified non-negative value less than or equal to 1 for each object". Therefore, claim 28 is patentably distinct from claim 29.

Art Rejections

Independent claims 7 and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Morein (USPN 6457034) in view of Haeberli et al., Journal Publication (Computer Graphics, v24, n4, August 1990, herein referred to as Haeberli), and further in view of Cesana et al. (USPN 6466220; hereinafter referred to as Cesana).

Independent claim 25 was rejected under 35 U.S.C. §103(a) as being unpatentable over Morein, Haeberli, and Cesana as applied to claim 17, and further in view of Adler et al. (USPN 6028907; hereinafter referred to as Adler).

Dependent claims 8-10, 18-22, and 26-33 were rejected under 35 U.S.C. §103(a) as being unpatentable over various combinations of Morein, Haeberli, Cesana, Adler, Murata et al. (USPN 5621866; hereinafter referred to as Murata), Takeuchi et al. (US Pub. 2002/0082081; hereinafter referred to as Takeuchi), and McReynolds ("Programming with OpenGL: Advanced Techniques" Siggraph 1997, page 112). [Note, dependent claims 9-10, 26-29, 31, and 33 are listed as rejected in the current Office Action Summary, but the current Office Action does not clearly state which of the prior art references cited above are relied upon for each of these rejections.]

Applicant respectfully traverses these rejections.

Claim 7 recites:

> A method comprising:
> (a) reading a first stream of image pixels corresponding to an image X_K from an image memory;
> (b) reading a second stream of pixels corresponding to an image A_K from an accumulation buffer;
> (c) blending each image pixel of the image X_K with the corresponding pixel of the image A_K based on an alpha value provided with the image pixel, and thus, generating a third stream of output pixels defining an image A_{K+1}; and
> (d) transferring the third stream of output pixels to the accumulation buffer;
> (e) performing (a), (b), (c) and (d) for each image after the first image of a sequence of N images X_K, for K = 0, 1, 2, ..., N-1.

Morein, Haeberli, and Cesana either singly or in combination do not teach or render obvious:

> "(c) blending each image pixel of the image X_K with the corresponding pixel of the image A_K based on an alpha value provided with the image pixel, and thus, generating a third stream of output pixels defining an image A_{K+1}" and "(e) performing (a), (b), (c) and (d) for each image after the first image of a sequence of N images".

In fact, the blending process as taught by Morein generates a blended image only after all images have been "accumulated" as taught in:

> column 5, line 64 through column 6, line 1 --

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"Blending color data from the drawing buffer 140 with that stored in the first accumulation buffer 170 may be <u>accomplished by simply **adding** the color data stored in the drawing buffer 140 to the accumulated color data stored in the first accumulation buffer 170</u>";

column 2, lines 7-10 --
"the accumulation buffer stores an accumulation data set for each pixel of the frame. Preferably, each accumulation data set <u>includes accumulated color data and a counter value</u>";

and column 2, lines 32-37 --
"When all of the images for a particular accumulation operation have been accumulated in the accumulation buffer, the color values stored in the accumulation buffer are <u>normalized by dividing the color data value for a particular pixel by the counter value corresponding to the particular pixel</u>".

The blending process as taught by Haeberli is provided in Section 3.2 on page 311:

"The accumulation buffer provides 16 bits to store each red, green, blue, and alpha color component, for a total of 64 bits per pixel. The primary operations that may be applied to the Accumulation Buffer are: ...... 2. Add with weight. Each pixel in the drawing buffer is added to the accumulation Buffer after being multiplied by <u>a floating-point weight</u> that may be positive or negative."

Note that Haeberli does **not** teach that the weight is specific for each pixel.

Applicant also respectfully submits that there is no teaching, suggestion, or motivation to combine Morein, Haeberli, and Cesana in any of these references or in the prior art. As held by the U.S. Court of Appeals for the Federal Circuit in *Ecolochem Inc. v. Southern California Edison Co.*, an obviousness claim that lacks evidence of a suggestion or motivation for one of skill in the art to combine prior art references to produce the claimed invention is defective as hindsight analysis. Furthermore, Applicant respectfully submits that it is nonobvious to combine Morein, Haeberli, and Cesana.

Furthermore, the showing of a suggestion, teaching, or motivation to combine prior teachings "must be clear and particular. . .Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence'." *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). The art must fairly teach or suggest to one to make the specific combination as claimed. <u>That one achieves an improved result</u>

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by making such a combination is no more than hindsight without an **initial** suggestion to make the combination. Applicant respectfully submits that there is no initial suggestion in the prior art for combining Morein, Haeberli, and Cesana, and that even were the three references combined, they would not produce the features of claim 7.

Therefore, Applicant submits that claim 7 and its dependent claims are non-obvious and patentably distinguished over Morein, Haeberli, and Cesana for at least the reasons given above.

Applicant further submits that claim 17 and its dependent claims are also non-obvious and patentably distinguished over Morein, Haeberli, and Cesana for at least the reasons given above in support of claim 7.

Furthermore, Adler either singly or in combinations with Morein, Haeberli, and Cesana does not teach or render obvious:

"(c) blending each image pixel of the image X_K with the corresponding pixel of the image A_K based on an alpha value provided with the image pixel, and thus, generating a third stream of output pixels defining an image A_{K+1}" and "(e) performing (a), (b), (c) and (d) for each image after the first image of a sequence of N images".

Therefore, Applicant further submits that claim 25 and its dependent claims are also non-obvious and patentably distinguished over Adler, Morein, Haeberli, and Cesana for at least the reasons given above.
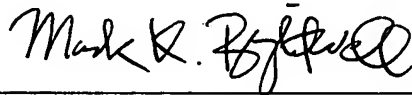
CONCLUSION

In light of the foregoing amendments and remarks, Applicant submits the application is now in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5681-14000/JCH.

Also enclosed herewith are the following items:

☒ Return Receipt Postcard

Respectfully submitted,

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